

AMENDMENTS TO THE CLAIMS

1. (Withdrawn) A microorganism which is deficient in repressor of L-methionine biosynthesis system and the L-methionine productivity.
2. (Withdrawn) A microorganism having enhanced intracellular homoserine transsuccinylase activity and L-methionine productivity.
3. (Withdrawn) A microorganism which is deficient in repressor of L-methionine biosynthesis system, and has enhanced intracellular homoserine transsuccinylase activity and L-methionine productivity.
4. (Withdrawn) The microorganism according to any one of claims 1 to 3, which further exhibits reduced intracellular S-adenosylmethionine synthetase activity.
5. (Withdrawn) The microorganism according to any one of claims 2 to 4, wherein the enhanced homoserine transsuccinylase activity is obtained by increasing copy number of a gene coding for the intracellular homoserine transsuccinylase, or enhancing an expression regulatory sequence for the gene.
6. (Withdrawn) The microorganism according to any one of claims 1 to 4, which has homoserine transsuccinylase for which concerted inhibition by L-methionine and S-adenosylmethionine is desensitized.
7. (Withdrawn) The microorganism according to any one of claims 1 to 6, which exhibits L-threonine auxotrophy.
8. (Withdrawn) The microorganism according to any one of claims 1 to 7, which exhibits enhanced intracellular cystathionine γ -synthase activity and enhanced intracellular aspartokinase-homoserine dehydrogenase II activity.

9. (Withdrawn) The microorganism according to any one of claims 1 to 8, which belongs to the genus *Escherichia*.

10. (Canceled)

11. (Withdrawn) A DNA which codes for homoserine transsuccinylase for which concerted inhibition by L-methionine and S-adenosylmethionine is desensitized, wherein the homoserine transsuccinylase has the amino acid sequence of SEQ ID NO: 26 including a mutation corresponding to replacement of arginine by cysteine at the 27th position, mutation corresponding to replacement of isoleucine by serine at the 296th position, mutation corresponding to replacement of proline by leucine t the 298th position, mutation corresponding to replacement of arginine by cysteine at the 27th position and replacement of isoleucine by serine at the 296th position, mutation corresponding to replacement of isoleucine by serine at the 296th position and replacement of proline by leucine t the 298th position, mutation corresponding to replacement of proline by leucine t the 298th position and replacement of arginine by cysteine at the 27th position, or mutation corresponding to replacement of arginine by cysteine at the 27th position, replacement of isoleucine by serine at the 296th position, and replacement of proline by leucine t the 298th position.

12. (Withdrawn) A method for producing L-methionine which comprises culturing a microorganism in a medium to produce and accumulate L-methionine in the medium, and collecting the L-methionine from the medium, wherein the microorganism is deficient in a repressor of L-methionine biosynthesis system and has L-methionine productivity.

13. (Withdrawn) The method according to Claim 12, wherein the microorganism further comprises at least one characteristic selected from the group consisting of:

(a) exhibits reduced intracellular S-adenosylmethionine synthetase activity;

- (b) exhibits L-threonine auxotrophy;
- (c) exhibits enhanced intracellular cystathionine γ -synthase activity and enhanced intracellular aspartokinase homoserine dehydrogenase II activity; and
- (d) has a homoserine transsuccinylase for which concerted inhibition by L-methionine and S-adenosylmethionine is desensitized.

14. (Withdrawn) The method according to Claim 12, wherein the microorganism is an *Escherichia* bacterium.

15. (Withdrawn) The method according to Claim 12, wherein the microorganism is *Escherichia coli*.

16. (Withdrawn) The method of Claim 12, wherein the repressor of L-methionine biosynthesis is the metJ protein.

17. (Withdrawn) The method of Claim 13, wherein the S-adenosylmethionine synthetase is encoded by the metK gene.

18. (Withdrawn) The method of Claim 13, wherein the cystathionine γ -synthase is encoded by the metB gene.

19. (Withdrawn) The method of Claim 13, wherein the aspartokinase homoserine dehydrogenase II is encoded by the metL gene.

20. (Withdrawn) The method of Claim 13, wherein the homoserine transsuccinylase comprises the amino acid sequence of SEQ ID NO:26, wherein at amino acid number 27 the arginine is replaced with a cysteine, at amino acid number 296 the isoleucine is replaced with a serine, and at amino acid number 298 the proline is replaced with a leucine.

21. (Withdrawn) A method for producing L-methionine which comprises culturing a microorganism in a medium to produce and accumulate L-methionine in the medium, and

collecting the L-methionine from the medium, wherein the microorganism has enhanced intracellular homoserine transsuccinylase activity and L-methionine productivity.

22. (Withdrawn) The method according to Claim 21, wherein the enhanced homoserine transsuccinylase activity is obtained by increasing the copy number of a gene coding for the intracellular homoserine transsuccinylase, or enhancing an expression regulatory sequence for the gene.

23. (Withdrawn) The method according to Claim 21, wherein the microorganism further comprises at least one characteristic selected from the group consisting of:

- (a) exhibits reduced intracellular S-adenosylmethionine synthetase activity;
- (b) exhibits L-threonine auxotrophy;
- (c) exhibits enhanced intracellular cystathionine γ -synthase activity and enhanced intracellular aspartokinase-homoserine dehydrogenase II activity; and
- (d) has a homoserine transsuccinylase for which concerted inhibition by L-methionine and s-adenosylmethionine is desensitized.

24. (Withdrawn) The method according to Claim 21, wherein the microorganism is an *Escherichia* bacterium.

25. (Withdrawn) The method according to Claim 21, wherein the microorganism is *Escherichia coli*.

26. (Withdrawn) The method of Claim 21, wherein the repressor of L-methionine biosynthesis is the metJ protein.

27. (Withdrawn) The method of Claim 22, wherein the S-adenosylmethionine synthetase is encoded by the metK gene.

28. (Withdrawn) The method of Claim 22, wherein the cystathionine γ -synthase is encoded by the metB gene.

29. (Withdrawn) The method of Claim 22, wherein the aspartokinase homoserine dehydrogenase II is encoded by the metL gene.

30. (Withdrawn) The method of Claim 22, wherein the homoserine transsuccinylase comprises the amino acid sequence of SEQ ID NO:26, wherein at amino acid number 27 the arginine is replaced with an cysteine, at amino acid number 296 the isoleucine is replace with a serine, and at amino acid number 298 the proline is replaced with a leucine.

31. (Currently Amended) A method for producing L-methionine which comprises culturing a recombinant *Escherichia* bacterium in a medium to produce and accumulate L-methionine in the medium, and collecting the L-methionine from the medium, wherein the bacterium is deficient in repressor of L-methionine biosynthesis system encoded by the endogenous metJ gene and has L-methionine productivity, and ~~which has enhanced activity of~~ intracellular homoserine transsuccinylase encoded by the *metA* gene of a *Escherichia* bacterium is increased compared to an unmodified *Escherichia* bacterium by increasing copy number of the *metA* gene including its own promoter, or replacing the native promoter with a stronger promoter and L-methionine productivity.

32. (Canceled)

33. (Currently Amended) The method according to claim 31, wherein the bacterium further comprises at least one characteristic selected from the group consisting of:

(a) exhibits reduced activity of intracellular S-adenosylmethionine synthetase encoded by the endogenous metK gene as compared to an unmodified *Escherichia* bacterium;

(b) exhibits L-threonine auxotrophy;

(c) exhibits enhanced activity of intracellular cystathionine γ -synthase encoded by the *metB* gene of a *Escherichia* bacterium and enhanced activity of intracellular aspartokinase-homoserine dehydrogenase II encoded by the *metL* gene of a *Escherichia* bacterium is increased compared to an unmodified *Escherichia* bacterium by increasing copy number of each of the genes including their own promoters, or replacing the native promoter with a stronger promoter; and

(d) has a homoserine transsuccinylase for which concerted inhibition by L-methionine and S-adenosylmethionine is desensitized, wherein the homoserine transsuccinylase comprising the amino acid sequence of SEQ ID NO: 26 contains at least one amino acid replacement wherein said at least one amino acid replacement is independently selected from the group consisting of replacement of the amino acid residue Arg-27 with cysteine, replacement of the amino acid residue Ile-296 with serine, and replacement of the amino acid residue Pro-298 with leucine.

34. (Canceled)

35. (Previously Presented) The method according to Claim 31, wherein the bacterium is *Escherichia coli*.

36. – 40. (Canceled)

SUPPORT FOR THE AMENDMENT

Claims 10, 34 and 36-40 were previously canceled.

Claim 32 is presently canceled.

Claims 31 and 33 have been amended.

The amendment of Claims 31 is supported by the originally pending claims, the corresponding claims as previously presented, previously pending Claims 34 and 36, and pages 10-49 as originally filed, including page 14, line 7 to page 15, line 2. The amendment of Claim 33 is supported by the originally pending claims, the corresponding claim as previously presented, previously pending Claims 37-39, and pages 10-49 as originally filed, including page 41, lines 8-17.

No new matter has been entered by the present amendment.